



## Demand for Equity Stock Investment: A Focus on Nigeria Stock Exchange Market

Jude Chidi Onyenama

Department of Economics, Madonna University

**Corresponding Author:** Jude Chidi Onyenama [jconye59@gmail.com](mailto:jconye59@gmail.com)

---

### ARTICLE INFO

*Keywords:* Stock Market, Equity Stock, Exchange Market and Investment

*Received :* 23, August

*Revised :* 24, September

*Accepted:* 25, October

©2023 Onyenama: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

The purpose of this is to examine those variables that determine investors demand for equity stock in the Nigeria stock market special attention was given factors such as earnings, dividends and net asset value. This study is a descriptive survey research aimed at investigating and to provide information on what influence the Nigerian equity stock investors in the Nigerian's stock exchange of the Nigerian capital market. Data have been collected from the Nigerian stock exchange market, the annual reports and statement of accounts of sample and several issues of business times. The hypothesis formulated has been tested at both 1% and 5% significance levels using the F-statistics of regression model. This may have jointly and severally the independent variables have a significant relationship with investment demand. From the conclusion, recommendation such as tune element indicates the rate of change of these variables overtime and encouraging companies to participate in the stock market which will enhance future activities of the Nigeria capital market.

---

## INTRODUCTION

The capital market is a section of the financial market which deals with long term instruments and instruments necessary for financing them. In developing countries like Nigeria, only a negligible percentage of business enterprises issue marketable securities, although recently many companies have been listed on the exchange due to the Federal government privatization and commercialization policy. The capital market is for those who need capital to finance heavy projects as the construction oil refineries, dams, roads all of which spread capital over long period. Just as the Central Bank is at the centre of the countries money market, the stock exchange market is at the centre of the capital market. The Nigerian capital market is made up the informal market, the market of negotiated capital funds, new issues market and stock exchange. This study focused on the Nigerian stock exchange market.

The stock exchange market is one of the oldest institutions in Nigeria capital market trading with seven floors at Lagos, Kaduna, Port-Harcourt, Onitsha, Kano, Owerri and Ibadan. Each floor or branch of the exchange market has a director and a secretary. The National Secretariat has a director-general and consists of three departments, the quotations department, the administration and the public relations department. The main function of the exchange is to regulate the trading in stocks and shares. This includes accepting securities for listing that is granting quotation. All securities granted quotations are listed on a big board in the main hall of the exchange and everyday, traders (authorize clerks representing the differed brokers) meet at 2:30pm to "call over" the names of the stocks and shares. When each share or stock is called out each broker indicates his interest and a deal is immediately consummated. During "call over" bargain. Ships are exchanges by the brokers. Bargain ships form the basic agreement between brokers and constitute the main evidence that a transaction has taken place. Contract notes are usually written up form such bargain ships.

Besides these, the exchange also has the function of authenticity transfers are made other than for transactions that have previously been tone on the floor of the exchange and secondly nominal transfers take place only between blood relatives. This help to discourage the high incidence of multiple applications which has been a feature of open public offers for sale or subscription of shares made in the Nigeria market in recent times. The central securities clearing system (CSCS) Plc was incorporated on July 29, 1992 as a financial Market Infrastructure (FMI) for the Nigerian capital market. It was commissioned in April 14, 1997 and commenced operations in April 14, 1997. On the 16th of May 2012, CSCS became a public liability company (PLC) by a special resolution. The Securities and Exchange Commission issued its license as an agent for Central Depository, clearing and settlement and delivery system for transactions in securities in the Nigerian capital market.

CSCS facilitates the delivery (transfer of securities from seller to buyer) and settlement (payment of bought shares) of securities transacted on the approved Nigerian exchanges. It enables securities to be processed in an

electronic book-entry from thereby substantially reducing the period it takes a transaction to commence and end.

CSCS has made visible strides in the Nigerian capital market and will continue to respond to the needs of the securities and commodities market to further enhance transparency and speedy settlement of transactions. Central securities clearing system functions are as follows;

- CSCS processes inter-market transfers (that is, transfers of transactions from money market to capital market etc.).
- They operate as an issue of central securities and clearing house of the exchange.
- They are in charge of securities on the stock exchange that is they guide and supervise stock transactions on the floor of the market.
- Central depository for share certificates of companies quoted on the Nigerian stock exchange.

A lot of interception has theorized on the factors or parameter that influences investment decision in the optical market. Though such theories abounds, there are no evidence of immediate consensus on the issue among the theorists. This creates a serious gap to be filled. The basic issue is whether investments in equity stock is influenced by any particular factor or by the interplay of these factors.

## LITERATURE REVIEW

### *Government Role in the Operations of the Stock Exchange Market*

The Federal Government in its report of the Odife panel on the review of the Nigerian capital market inducted the stock exchange of lacking imagination to attract more foreign in investors and design the market despite its provision of enabling investment environment for investment growth in the country led to the government intention to establish another parallel stock exchange market in the Federal Capital Territory Abuja.

Government decision immediately generated series of controversies that engulfed the nation capital market like a “wild-wind” as experts gave reasons for and against the establishment of another stock exchange market. But the most popular view is the maintenance of a single stock in the sense that many countries with more than one stock exchange are merging them through satellite at least to prevent conflicting indication about the economy it was because of this that Nigerian stock exchange decided to computerize their activities.

### *The General Management and control of the Nigerian Stock Exchange*

The management and control of the Nigerian Stock Exchange can be grouped into the following:-

- Administration and secretariat department
- Second tier-securities market department
- Research and information system department.
- Quotation department.
- The Director General of Nigerian Stock Exchange

The day-to day affairs of the exchange are administered by the Director General and his team of executive heads of the department and branch directors. Articles 17 of the Nigerian stock exchange stipulates that, the council shall appoint an official of the exchange to be known as director-general who shall be the chief executive that will be answerable to the former super intending the general working of then exchange.

The Director General is therefore, at the helm of the affairs, directing the operation of the exchange he does this with the assistance of four (4) department heads and two (2) branch executives who report directly to him.

Some Departments in the Nigerian Stock Exchange are;

- Administration and Secretarial Department: This department handles personnel management, finance accounts and provides secretarial services to the national council of the exchange.
- Second-Tier Securities Market Department: The market or department oversees all aspect of promotion, quotation and dealing in securities of companies which are quoted on the second-tier market of the exchange.
- Research and Information System Department: The responsibility of the production and publication of the stock exchange daily official list and the stock market price index is vested in this department. It research, monitors and documents every transaction or deal struck.

Capital Formation in the Nigerian Stock exchange

Pagano (1993), employing the endogenous growth model posit that financial intermediation of the capital market could affect economic growth through three channels:

- Changing the proportion of savings towards investment.
- Changing the marginal productivity of capital otherwise called capital formation, and
- Changing the rate of savings in the economy.

By this process, capital market lowers transaction cost, achieves diversification and lowers risk, provides liquidity and lowers information asymmetry by which it contributes productivity of capital. Consequently, capital market allows entrepreneurs to concentrate their efforts; attention and resources on there are business of creating new values or utility, pursuing innovations for future purposes and engaging in real and financial investment that could result in capital formation. The capital market activities in relation to capital formation are captured by some indices such as:

- The ratio of new issues to total investment in fixed assets,
- The ratio of market capitalization to total investment in fixed assets,
- All share index,
- Rate of change in the volume of transaction, and
- Rate of changing the value of transaction.

According to the World Bank (2013), Gross Fixed Capital formation (Formerly gross domestic fixed investment) includes land improvements (fences, ditches, drains and so on); plant machinery and equipment purchases; and the construction of roads, railways and the like, including schools, offices, hospitals, private residential dwellings and commercial and industrial

buildings. According to the 993 SNA, net acquisitions of valuables are also considered capital formation. It is therefore the total investment in fixed assets financed by new issues of financial securities in the capital market. Osaze (2007), theorized that these new issues contribute to the stock of capital in an economy and hence capital formation.

Market capitalization is the total value of all equity securities listed on stock exchange. It is a function a prevailing market price of quoted equities and the size of their issued and paid-up capital. Market capitalization is the most important measure for accessing the size of a capital market. The ratio of market capitalization to total investment in fixed assets reveal the total investment in fixed assets financed by equity fund on the capital market. It also indicates the amount of CFCF represented in the Nigerian Stock Exchange. The all share index or stock market index is an average of the prices of equity and the number of securities in a stock market at a given period of time. It is an important measure of stock market performance. The other performance indicators are the volume and value of the transactions. While the volume of transaction refer to the quantity of the securities traded on a market per time. The value of the transaction is the quantity of the securities multiplied by the prevailing market prices of each security per day on which business was transacted. Capital formation will fell the effect of the capital market activities more positively the ratio of new issues to total investment in fixed assets, all share, index volume and value of all deals are on the increase. These increases will drive both direct and portfolio investment in fixed productive assets which will in turn translate into high productive capacity (capital information) and increase output level of goods and services in the economy.

## METHODOLOGY

Theoretically, there are many models for values determination of equity stock. There of the basic models will be discussed in this study viz.

Asset valuation model

Dividend model and

Earning model

Asset Valuation Model

This model regards the net asset value of a form as the critical valuable that determines the value of its shares. Asset Valuation is the process of determining the fair market or present value of assets, using book values, absolute valuation models like discounted or comparables. Such assets include investments in marketable securities such as stocks, bonds and options; tangible assets like buildings and equipment; or intangible assets such as brands, patents and trademarks.

$$V = A - L$$

$$VPS = 1/N (A - L)$$

Where:

V = Value of a form

VPS = Market value of asset

L = Total liabilities

N = Number of shares issued and paid up  
A = Total Assets

### Earning Valuation Model

This model uses the stream of earnings. The earning valuation model is a method for determining a company's equity value based on book value and earnings. Also known as the residual income model, it looks at whether management's decisions cause a company to perform better or worse than anticipated. The model concludes that investors should pay more than book value if earnings are higher than expected and less than book value if earnings are lower than expected.

$$V_t = E_t - \frac{I_t}{(1 + k)^t} \quad t = 1$$

Where:

$V_t$  = Total value of firm at tth time period

$E_t$  = Total earnings of a firm in period t

$I_t$  = Total investment discount rate

Those who do not approved for earnings cannot withdraw from the cooperation as they are earned, they must wait for cast dividend to be paid.

### Dividend Valuation Model

This model is similar to the earnings approach but the concept is different. The model presupposes that dividend is the critical variable and therefore the value of a security is the sum of discounted of its dividend paid. The dividend valuation model provides a device in which we can relate the value of a stock to fundamental characteristics of the company. One use is to associate the company's stock's price-to-earnings ratio to fundamental factor. The Dividend Valuation Model can be modified for patterns including a constant dividend, a constantly growing dividend, and a dividend that grows at different rate depending on the period in the future. The model can also be related to fundamental factors that drive the value of a company's equity, including the return on equity and the dividend payout.

$$V_t = E + \frac{D_t}{(I + K)^t}$$

$t = 1$

where:

$V_t$  = Total value of form at 11th time period.

$D_t$  = Total dividend of the firm paid in period to t to shareholders.

$K$  = Appropriate discount rate.

The implicit assumption is that equity stock is held in perpetuity and therefore owners would expect other income apart from accurate dividends.

## RESEARCH RESULT AND DISCUSSION

### *Controversy*

Protagonists of the view that dividend as it stands is more certain than earnings and investors value certainty. They believe the payment of dividend is associated with good corporate performance, which attracts investors and consequently increases the market value of share. They claim that certain stock attract kind of investors because they prefer dividend payout adopted by such firms.

Cardon provided some empirical data to support that dividend supremacy hypothesis. He demonstrated with empirical data, that dividend payout ratio and changes has significant effects on price earnings ratios. With this he concluded that equity stock value is derived from dividend.

Critics of dividend supremacy hypothesis point out that the board of directors determines the turning and amount of dividend to be paid, which implies that dividend, is subject to some measure of manipulations. Dividend valuation would therefore lead to unreasonable conclusion.

Walter attempted to fabricate a theoretical model to depict the relationship between dividends policies and common stock prices. His attention was restricted to common stock of large public corporations because of the imperfect market for the securities of small firms with their principal shareholders.

Van Horne and Mc Donald investigated the combined effects of dividend polices and new equity financing decision on the market value of the firms common stock. Empirical tasks were performed with year and 1968 cross section for two industries using the following regression model.

$$Po/Eo = X2 + x1 (g) + X2 (Do/Eo) + X3 (LEV)U$$

Year period (1999-2000), the cross sectional data collected was analyzed on a multiple regression model  $Y = a + b_1 A + D2 + B3 X_3$

Where:

Y = Value of shares traded

X1 = Earnings

X2 = Dividends

X3 = Net asset value

In view of the fact that the most of the available research literature has been concentrated in particular sectors of the economy. The present study is an attempts to investigate share value determination at the cross sectional level.

Dividends are portion of profit after deduction of taxation. It is return to shareholders for taking risks. Every investor will expect improved dividend every year. In fact, many will expect dividend to more in direct proportion with profit that is when profits are high, higher dividend policy give rise to speculations and uncertainties about the future size of dividend income this raise widely. The aim of every business should be to retain as much of its profit for expansion and pay reasonable dividend to shareholders who had to be compared with income derived from gilt-edge securities and saving accounts. A well guided dividend policy means steady and consistency of its payment. Assuming the shareholders steady dividend income, it gives confidence and

encourages demand by numbers of the investing public for share of the company. Confidence in and demand for the share will rise to steady appreciation of the share value. If profits should mean cash and company exist for today; dividend and the company will be left with no future to work forward to. Today's profits are as result of yesterday's investment decision. Government policies have put some restrictions on what dividend a company should pay. This has forced the company to plough back that undistributed portion. Dividend is that portion of profit and depletion of cash resources it (dividend) becomes current liabilities once they are declared unlike tax liabilities the company has a greater part to play within deciding when to pay dividend to shareholders. Nevertheless, most analysts are unwilling to declare that dividends are totally relevant. Almost all successful firms pay dividends although "growth" stock companies may pay negligible part of their dividend and retain earnings in order to enhance the value of the firm's stock, dividend policy is a major concern of financial managers.

The 1962 article by Merton Miller and Franco Modigliano is the most vital theoretical framework on dividend policy. They showed that to investors, dividend policy is irrelevant provided capital market are perfect, that each investor is rational and that tax dividend and capital gains are taxed at the same rate. If a dividend changes, it is part and parcel of a shift in the firm's debt ratios, for example when any capital market response can be attributed to the capital structure change rather than to dividend policy per se. It is accepted that several individual investors should not be held or should be held only at price lower and below the prices of similar stock that do pay dividends, this belief is not rational. More importantly may have a part if the market that strongly influence the pricing of corporate shares. On the side of the coin, investors also seem sharply aware of the tax consequences of dividends. Investors under high tax levy seem to hold high dividend stocks essentially because of tax savings. If investors do demand dividends, then corporation should not eliminate all dividends, but it is impossible for investors not to demand dividends as so corporations cannot eliminate dividends.

#### *Theories of Stock Market*

An understanding of the different theories of the stock market still offers the best possibility of making an informed investment.

#### *Company Fundamentals*

This theory argues that the best way to make a decision about investing in the stock market is to do research on the company itself. Although, there is no strict law of determination, this theory holds that a company is successful in its operations will be worth achieving in. Although indicators like profit do not directly determine stock price, they can be a good sign of which way the stock is going. This way of decision making assumes that although an unsound company, like Enron for example, can skyrocket in terms of stock price, this performance cannot be maintained. On the other hand, a solid company with an undervalued stock. On the other hand, a solid company with an undervalued



stock price will eventually be organized by the investing public and as a result the stock price will rise.

#### *Environment*

This is a theory of investment that chooses to spend much less time analyzing the fundamental characteristics of any investment, in favour of looking at the investment climate in detail. This means looking at the broader economic and political environment. This mode of investment pays special attention to factors such as new legislation that will effect investment or the implications of investing in a company that has just opened up operations in a different country.

#### *Supply and Demand*

This theory is based on the classical idea of supply and demand as it relates to the stock market. Essentially, this theory proposes that the price of any stock is not affected as much by the company's performance or his general political climate so much as by the interaction of supply and demand. There are finite amount of stock is affected as much by the company's performance or the general political climate so much as by the interaction of supply and demand. There are a finite amount of stocks and investors. On any given day, there might be more people who want to invest when there are stock available, or vice versa. In this way, the interaction between the offering of stocks and investments by the public determines whether the value goes down in the case of excessive supply or up, in the case of excessive demand.

#### *Investor Psychology*

This is the type of view point that observes investors behaving with herd mentality. Stock prices can skyrocket or plummet with little prompting other than the perception that others are buying and selling.

#### *Stock Market Value Methods*

The different in stock valuation is a finding out the cost price of stock, this is not easy when quantities of a particular stock item are continually being bought in –often at different prices and then sold. Some companies have stock in number of different forms e.g. a manufacturer may well have stocks of raw materials, work-progress, and finished goods. IAS 2, inventories allows companies to use one of two methods to calculate the cost price of their stock.

#### *FIFO (First in, First out)*

In this method, the first (oldest) stocks acquired are assumed to be used first. This means that the stock on hand at any time is assumed to consist of the most recently acquired items.

#### *Avco (Average Cost)*

In this method the weighted average cost of items held at the beginning of the year is calculated, using the formula:

Weighted average cost =  $\frac{\text{Total cost of good in stock}}{\text{Number of items in stock}}$

*Number of items in stock*

The weighted average cost is then used to value goods sold. A new weighted average cost must be calculated each time that further stocks are bought during the year.

However, the theoretical review explained two theories which were theories of stock valuation and theories of stock market. Stock Valuation theory was more valuable, it show the value of equity demanded for base on Valuation models namely Asset valuation model, Dividend valuation model and Earning valuation model.

#### *Analysis of Research Question*

Analysis of data from companies officers (Dealers) and officers of the Nigeria Stock Exchange Market Port-Harcourt.

Table 1. Nigerian Stock Exchange Market Port-Harcourt Branch

Department	No. of Respondents	% of Response
Director	1	5.5
Secretary	1	5.5
Quotations	2	11
Administrative	6	33
Public relations	5	29
Others	3	16
Total	18	100%

Source: Field Survey, 2021.

The table above (.1) reveals that the Port-Harcourt Stock Exchange Market is made up the different departments and the respondent that received and returned their questionnaire.

Table.2 Reveals That the Under Listed Services Including Those Mentioned are Fully Render. The Nigeria Stock Exchange Market.

Name of Company	Services	Percentage (%)
Nigeria Stock Exchange Market	To provide capital market for capital for heavy projects. It deals with long term instrument necessary for financing them	100%
		100%

Table.3 Also Reveals that the Stock Exchange Market Also Educate Investors.

Department	No. of Respondents	% of Response
Director	1	5.5
Secretary	1	5.5
Quotations	2	11
Administrative	6	33
Public relations	5	29
Others	3	16
Total	18	100%

Source: Field Survey, 2021.

The table above shows that there is no poor customer/ staff relationship in the stock exchange market with very good coming the largest number of (8) of respondents and fair with the lowest number (1) of respondents.

Table 4. bad customers/ staff in the exchange market

Response Variables	No. of Response	% of Response
Excellent	3	16
Very good	8	45.5
Good	6	33
Fair	1	5.5
Poor	-	-
Total	18	100%

Source: Field Survey, 2021.

The table above shows that there is no poor customer/ staff relationship in the stock exchange market with very good coming the largest number of (8) of respondents and fair with the lowest number (1) of respondents

Table. 5 Respondent Results 1

Industrial Classification	No of Companies	No of Percentage
Manufacturing sector	12	77
Commercial sector	8	51.6
Service sector	5	32.2

The above table .5 reveals the twenty-five companies selected out of the total number of companies quoted on the stock exchange three major sub-groups namely manufacturing, commercial and services sector were fully represented. List of Companies Selected and Industrial Classification of Selected Companies.

Table 6 Respondent Data

S/NO	Companies	Industrial Classification
1	Berger Paints	Manufacturing
2	Guinness Nigeria	"
3	Lever Broker Nigeria	"
4	7-up Bottling Companies	"
5	Nigeria Tobacco Company	"
6	PZ Industries	"
7	Nigeria Breweries	"
8	Nestle Foods Nigeria	"
9	Vita Foam Nigeria	"
10	Flours Mille Nigeria	"
11	Nigeria Wire and Cable	"
12	Chemical and Allied Product	"
13	Julius Berger Nigeria	Commercial
14	Morrison Industries	"
15	ImpresilBokouw	"
16	Maureen Laboratories	"
17	Costain (WA)	"
18	Bata Nigeria	"

19	Lennards Nigeria	“
20	CFAO	“
21	SCOA Nigeria	Service
22	UTC Nigeria	“
23	Tripple Gee and Company	“
24	NRC Nigeria	“
25	John Holt	“

The above list reveals that many Nigeria owned and Nigerian indigenous promoted companies are listed on the exchange market and are also sub-groups. It also covers all the sectors namely, manufacturing, commercial and service sectors.

Table 7. Respondent Data

S/N	Companies	2017	2018
1	Berger Paints	1.00	1.33
2	Guinness Nigeria	4.18	2.27
3	Lever Broker Nigeria	9.56	2.27
4	7-up Bottling Companies	5.25	0.27
5	Nigeria Tobacco Company	4.39	3.38
6	PZ Industries	6.33	2.51
7	Nigeria Breweries	3.23	2.29
8	Nestle Foods Nigeria	4.03	9.95
9	Vita Foam Nigeria	9.84	2.26
10	Flours Mille Nigeria	8.88	9.78
11	Nigeria Wire and Cable	0.20	2.30
12	Chemical and Allied Product	2.16	3.52
13	Julius Berger Nigeria	1.13	0.44
14	Morrison Industries	1.53	0.27
15	Impresil Bokouw	3.10	4.01
16	Maureen Laboratories	2.00	1.07
17	Costain (WA)	1.00	0.87
18	Bata Nigeria	0.72	1.26
19	Lennards Nigeria	0.71	0.64
20	CFAO	0.33	0.28
g21	SCOA Nigeria	1.00	1.00
22	UTC Nigeria	0.92	0.23
23	Tripple Gee and Company	1.20	5.60
24	NRC Nigeria	3.71	1.19
25	John Holt	2.53	6.25

Source: Compile from annual report stock exchange and it also show the total number of shares traded annually (000) on the stock exchange market between 2020 and 2021.

The table above reveals the market price per share (kobo) for the year ended December, 2020 and 2021.

Table 8. Numbers of Questionnaires Shares

S/N	Companies	Industrial Classification	
1	Berger Paints	11,000	27,000
2	Guinness Nigeria	6000	19000
3	Lever Broker Nigeria	13000	3000
4	7-up Bottling Companies	7000	27000
5	Nigeria Tobacco Company	5,000	4000
6	PZ Industries	75000	3500
7	Nigeria Breweries	35000	29000
8	Nestle Foods Nigeria	7000	17000
9	Vita Foam Nigeria	1000	3000
10	Flours Mille Nigeria	19000	20000
11	Nigeria Wire and Cable	1000	3000
12	Chemical and Allied Product	300	4000
13	Julius Berger Nigeria	2000	11000
14	Morrison Industries	2000	2000
15	ImpresilBokouw	4000	19000
16	Maureen Laboratories	3000	34000
17	Costain (WA)	5000	13000
18	Bata Nigeria	2000	1000
19	Lennards Nigeria	1000	2000
20	CFAO	4000	1000
21	SCOA Nigeria	1000	1000
22	UTC Nigeria	2000	10000
23	Tripple Gee and Company	6000	1000
24	NRC Nigeria	600	4000
25	John Holt	6000	7000

Source: Compiled form Annual Report of sample firm quoted on the Nigeria Stock Exchange.

Ho: The multiple regression coefficients are equally significant (the independent variables are equally significant).

Hi: The multiple regression coefficients are equally significant (the independent variables are not equally significant).

An empirical result on Table 1 shows that the coefficients of multiple determinations  $R^2$  ranged from 0.01 to 0.05 for the period being considered. It shows that earnings (X1), dividend (X2) and net asset value (X3) accounted for 1% to 5% of the variability in the value of shares traded. It shows that all the coefficient of the independent variables were positive and significant.

The significant of these variables influences in no small measure, the investors decision as to what equity stock to invest in. This is further substantiated by the significant of the joint effect of the variables as determined by the F-statistics. Therefore, we accept the null hypothesis that demand for equity stock is dependent on earnings, dividend and net asset value and regret the alternative hypothesis, that is it is not however, these independent variability in value of

shares traded. This means that here are other variables not included in the regression model which affects the variability of the value of shares traded.

Empirical Results of Earnings, Dividend and Net Asset Value on Investment Demand

Table 9. Respondent Result

Year	Dependent	Constant	Co-efficient	F-Ratio
2020	1	9 -158.105478	+ $b_1x_1 + b_2 X_2 + b_3 x_3$ + 2.28828796 $x_2$ +0.535705107 $x_3$	13.0142

### Test of Hypothesis

For the coefficient of multiple determination

$$R^2 = \frac{\text{SS due to regression}}{\text{Total SS}} = \frac{\text{SSR}}{\text{SST}}$$

But  $\text{SST} = \text{SSR} + \text{SSE}$

Where;

$\text{SSE}$  = Error sum of square

$\text{SST}$  = Total sum of square

$\text{SSR} = b_1 x_1 y + b_2 y_2 y + b_3 x_3 y$

$\text{SST} = E(y - \bar{y})^2 = \sum y^2 - \frac{(\sum y)^2}{n}$

$\text{SSR} = 3350858.579$

$\text{SSE} = \text{SST} - \text{SSR} = 1802343.670$

Hence,  $R^2 = \frac{\text{SSR}}{\text{SST}} = 0.650247829$

65.02% of the variance y is determined or accounted for by the variable  $x_1, x_2, x_3$ , this implies that y is greatly dependent on the three factors  $x_1, x_2, x_3$ .

Anova Table for the 2020 Data

Table 10. Resondent Result

Source	Df	Ss	Ms	F-ratio
Regression	3	3350858.579	1116952.86	13.0142
Residual	-	-	-	-
Error	21	1802343.670	85825.88905	-
Total	24	5,153,202.249	1202778.749	13.0142

Note that  $n = 25$

To test the nature of the dependent variable y and the set of independent variable  $x_1, x_2, x_3$ .

Thus:

$H_0$ : The multiple regression coefficients are equally significant (i.e.  $H_0: b_1 = b_2 = b_3 = 0$ ).

$H_1$ : The coefficients are not equally significant (i.e.  $H_1: b_i \neq 0, p < 0.05$ ).

Test at  $\alpha = 5\%$  level significant. The F-value at 0.05 with 3 and 21 degrees at freedom is 3.07 that is  $F(0.05)_{3,21} = 3.07$

Decision

Since  $F_{\text{calculated}} = 13.10$  is greater than 3.07, we reject  $H_0$  and conclude that the multiple regression are not the same (and hence they are significantly

different). The implication is that each of the variables  $x_1, x_2, x_3$  is distinct significant factor and this in line with the above conclusion.

Empirical Result of Earning, Dividend and Net Asset Value on Investment Demand

For the coefficient of determination

$$R^2 = \frac{SSR}{SST}$$

$$SST$$

$$SSR = b_1 x_1 y + b_2 x_2 y + b_3 x_3 y = 110451.333$$

$$SST = \sum y^2 - \frac{(\sum y)^2}{n} = 1902776.528$$

$$SSF$$

$$\text{Hence, } R^2 = \frac{SSR}{SST} = 0.5835952414$$

$$SST$$

This suggest that about 58.30% of the variance of  $y$  is accounted from by the variable  $x_1, x_2$ , and  $x_3$ . Hence,  $y$  is averagely dependent on the three factor  $x_1, x_2$ , and  $x_3$  for the ANOVA use the model

$$SST = SSR + SSE$$

$$\text{That is } SSE = SST - SSR = 792325.192$$

Anova Table for the 2020 Data

Table 11. The Calculation Results

Source	Df	Ss	Ms	F-ratio
Regression	3	110451.333	36817.111	9.8106
Residual	21	792325.192	37729.77105	
Error	-	-	-	
Total	24	902776.525	74546.88205	

From the analysis which gave  $R^2 = 58.36\%$  indicating that  $y$  depends on  $x_1, x_2$ , and  $x_3$ . It is necessary to test of the native of the relationship/dependency as follows:

$H_0$ : The independent variables are equally significant that is,

$H_1$ : The independent variables are not equally significant that is,

$H_0$ : The multiple regression coefficients are equally significant that is,

$H_1$ : The multiple regression coefficients are not equally significant.

Test at 0 =1% and 5% level of significance respectively hence from table F (0.01) 4.87

Decision

Reject the  $H_0$ : and calculate that the multiple regressions are not equally significant. That is the independent variables are not equally significant.

Interpretation of the Results of the Analysis from the Two Years (2020 and 2021)

Observe that  $R^2$  (2020) = 65.02% and (2021) = 54.36%

Average  $R^2 = 61.69\%$ . this indicates that about 62% of the variation in the department variables  $y$  is affected by  $x_2$ , and  $x_3$  are significantly different when test at both 1% and 5% levels of significant.

Since the relationship between value of shares traded and earnings is more of positive significant relationship it means a unit increase in earnings will result in an increase in the value of shares traded. That result in an increase in the value of shares traded. That result in an investment demand. As dividend

shows that a similar influence it also holds that a unit increase in the value of shares traded. The same applies to net assets value.

## CONCLUSIONS AND RECOMMENDATIONS

The four metric have been used to calculate the joint effect of the independent variables on investment demand. It also indicates the effects of each variable when the other variables were taken into consideration. From the research work, those factors found into consideration. From the research work, those factors found to be effect on demand for equity stock investment are

- Earnings: When we talk of earning under equity stock investment it simply means the value at hand after deducting all the necessary expenditures, with the earnings at hand, one may determine the proportion to be allowed for ploughing back if need be, and also proportion for dividend. With some organization, they do not plough back any proportion of it, so that the dividend to be paid to shareholders would be encouraging which would serve as an attractive point to potential investors.
- Dividend: is that percentage form earnings which have been taken out to be shared among the shareholders for compensation of risk bearing.
- Net Asset Value: This is the market value of all assets less the book value of all outstanding liabilities. This also attract some potential investors because some of them do booked at the organization's net worth before investing on it because they will have the confidence of gathering their money if liquidation arises from this study, the researcher has seen that jointly and severally the independent variables have a significant relationship with investment demand.

From the hypotheses tested, it had been laid that earning, dividend and net asset value affects demand for equity stock in Nigeria. However, it is yet certain whether it is these factors per-se on information about them that affect investment demand. To resolve this, the following recommendations are made:

- Time Factor should be brought into indicates the rate of change of these parameters over period of time and how this will affect rate of investment.
- Efforts should be made with regards to information about these variables easily available to Nigeria investor.
- Despite the fact that there are many industries in Nigeria, only about one hundred and sixty-one (161) companies are currently quoted in the stock exchange. This is relatively small compared to the number of inventors and potential investor. As a remedy companies should be encouraged in the capital market.
- An incentive aimed at increasing demand for quoted securities should be directed at dancing the investor's net return. For instance, we can increase tax credit on dividend income instance; we can increase tax credit on dividend income. The tax rate on capital gains can also be lowered or completely abolished; this will also increase speculation on



the stock market once investors know that their capital gains would not be taxed.

- Another measure is directed at gradually eliminating the double taxation, which occurs on company's income tax.
- The need of ploughing back earnings is necessary in order to expand by purchasing fixed assets which would increased the net assets value of the company which would attract investors and potential investors.

Under this programme, the exchange should made investors or the general public understand that share certificates of quoted companies on the stock exchange are accepted as collateral for bank, for this might entice business man particularly into procuring more shares which they might use as collectable security if the need arise.

Nigerian who practices the popular Isu-su contribution should be persuaded to invest their funds in quoted securities. They should be made understand that such practice does not earn them any income or interest but investing in securities will reduce the coast of holding idle cash removing the waste funds emotional expenditure.

#### **ADVANCED RESEARCH**

For further research, more independent variables like government policies, risk exposure, market price liability structure and board of director's composition should be incorporated in the present (four by four metric model). That is multiple regression metrics. To test jointly and severally their effect on investment demand, the rate of change of these factors over the few should be used as the independent variables so as to take care of time factor.

## **REFERENCES**

- Alile, H.I (2011): The Nigerian Stock Exchange, Abuja Jeromeliaihe Enterprise Ltd.
- Al-Tamimi, H.A (2004): Factors Influencing Individual Investor Behavhiour .An empirical study of the United Arab Emirates Financial markets.
- Epstein, M.J (2000) Social disclosure and individual investor. Accounting, Auditing and Accountability Journal vol.4.199 pp94-109.
- Kack C,F. Investment Analysis and Management 3rd Ed. New York McGraw Hill Company 1980 p. 282,283.
- Lo. A. Mamaysky& Wang (2000) Foundations of technical analysis: Computational Algorithmus, statistical influence and empirical implementation. Journal of finance 55,1705-1765.
- Sultana S.T (2010) An empirical study of Indian individual investors behavior. Global Journal of Finance and Mnagementvil 2 Number 1 pp19-33.
- Wera. A. (2006) A survey of the Influence of Behavioural Factors on Investors activities at the Nairobi Stock Exchange. (Unpublished MBS project, University of Nairobi).